Massachusetts Urban & Community Forestry Program

The Citizen Forester

AUGUST 2012

Street Tree Inventories

By Mollie Freilicher MA-DCR Community Action Forester With the growth of the free i-Tree software and the development of technology that is making the collection of data easier, more com-

munities are seeking guidance on conducting a street tree inventory. This article will go through the steps to conduct a street tree inventory in a community. Much of this information is adapted from the Arbor Day Foundation Tree City USA Bulletin #23 "How to Conduct a Street Tree Inventory."



There are lots of reasons to conduct a tree inventory. An inventory can help your community:

- Develop a systematic tree care program and reduce liability
- Prioritize maintenance needs
- Increase efficiency through better utilization of crew time and resources for tree maintenance
- Identify areas for tree planting and help select appropriate species for diversity
- Help better use limited budget resources
- Provide information on the composition, age, and structure of your urban forest
- Communicate the benefits and value of trees to the public
- Engage and educate the public through a volunteer inventory
- Engage and educate the public through the presentation of inventory data (such as the <u>Town of</u> Amherst has done)

- Educate elected officials and others in your local government about the value of trees and the benefits they bring to the community
- Justify and leverage funds
- Enable coordination with other departments on issues related to public shade trees
- Evaluate successes in planting to better plan for future tree planting

The first step in conducting an inventory is to think about how the inventory will be used. Will it be used for day-to-day management of trees? Will it be used for long-term planning? Will it be used to assess the risk of a pest, such as Asian longhorned beetle or emerald ash borer? It is likely that a community will use an inventory for multiple purposes, but the use or uses for the inventory must be clear at the outset, as these will guide the entire inventory process.

In considering how the inventory will be used think about the scope of the inventory—will

it cover a downtown or town center, a neighborhood, main roads, or another area? You may want to start out with a pilot inventory in a small area and then, based on the experience gained from it, conduct an expanded inventory.

There are many kinds of tree inventories, and the kind you choose to conduct will be a reflection of how your community will use the tree inventory:

 Complete Inventory periodically updated every 5-10 years or updated continuously

(with a resurvey every 5-10 years.) A continuously updated inventory is best for reducing liability and improving urban forest management.

Up Ahead:
Tree
Inventories 1
Species
Spotlight 5
Growing
Greener 6
Growing on
Trees 6
On the
Horizon 10

(Continued on page 2)

Street Tree Inventories

(Continued from page 1)

- Sample Inventory—randomly sample a percentage
 of streets or blocks. This type of inventory is used to
 identify composition of urban forest—age, species,
 planting spaces, etc. This type of inventory is not
 used for day-to-day management, but can be used to
 get a "snapshot" of trees in a community. This could
 also be used to conduct a pre-storm assessment under the protocols of the i-Tree Storm program.
- Specific Problem Inventory—targeted to a specific goal, such as finding all of the host trees for Asian longhorned beetle or all the risk trees.
- Windshield Survey—data are collected from a vehicle with 3-4 observers and recorders. This type of inventory can be useful and accurate for collecting data, although this method also may limit some of the data you can collect.
- Tree Canopy/Aerial Cover Type Survey assessment conducted using aerial photographs to assess tree canopy cover. This type of survey can be useful in long-term planning and assessing trends in canopy cover in a community.
- Park or Natural Area Survey—park trees can be mapped for management purposes, as well as to provide information to the public.

What data should you collect?

The data you collect should be specific to the needs of your community. There are several categories of information you can collect: location, tree information, maintenance needed, site information, pest information, survey information, and other data. The types of information you collect should reflect the goal of your inventory and provide data that managers and planners will use. Nobody wants to spend their time gathering unnecessary data. The following are the general categories of information:

Location information can be as simple as a street address or could also include a GPS point. The main goal with location information is to be able to find the location again, whether it is for a tree, a vacant planting space, a stump, or something else.

Tree Information includes species, often abbreviated with a species code such as those used by i-Tree. (Under this code system, for example, red maple, *Acer rubrum* becomes ACRU.) Tree size is important and can be measured at *diameter at breast height*, also known as

DBH, (4.5 feet from the ground) and can be recorded as a specific measurement or as a size class. An inventory can also record tree height and canopy spread using simple tools. Information on tree condition can also be collected using condition classes such as *good*, *fair*, *poor*, or *dead*.

Maintenance Needs are important for planning the day-to-day management of trees. Maintenance needs can include various types of pruning, removal, stump removal, treating pests, staking, no immediate maintenance needed, or other tasks. <u>i-Tree Streets</u> has a category for general maintenance recommendations, such as "small tree routine" or "large tree immediate" to help prioritize maintenance.

Site Information can include details on the planting conditions (tree pit, raised planter, lawn, median, etc.), as well as the land use in the area (industrial, commercial, residential, rural.) Information on overhead wires and sidewalk damage from tree roots can also be collected.

Pest or Disease Information can be important in early detection of diseases, such as Dutch elm disease, and of pests, such as Asian longhorned beetle and emerald ash borer. Collecting pest information will require additional training, especially if you will be working with volunteers, but can be beneficial in early detection of pests.

Survey Information can include the surveyor name or team, date, and time. This information can be helpful in quality checks.

Other information can include data on historic trees, a category for street trees or park trees, and general notes on a tree. i-Tree Streets has a checkbox, "Note this Tree," that will flag a tree for further review, whether for an ID issue or for suspicious pest activity. It is handy to have a notes field where you can include information for a particular tree that is not recorded elsewhere.

How to Gather Data

With the advent of small, personal digital assistants (PDAs), smartphones, tablets, and the i-Tree software suite, it is easier to collect inventory information digitally. (The i-Tree software suite is expected to be compatible with smartphones and tablets this summer.) i-Tree Streets has default categories and fields that make setting up an inventory easy, and you can also customize the inventory for the needs of your community. With digital

(Continued on page 3)

(Continued from page 2)

data collection, the need to enter data manually into a computer is eliminated, reducing the possibility of transcription errors. That being said, digital collection using a PDA or smartphone may not be for everyone, so manual data collection with pencil and paper may be preferable for some communities or for some projects.

Think about the software you will use to manage the data because this may impact how you collect data. i-Tree Streets is a free option that is part of the i-Tree software suite and can be used to manage data and prioritize management activities.

There are many software programs on the market that can aid management of trees and of the data. In 2009, the University of Florida IFAS Extension released a publication comparing tree inventory software that will help explain some of the differences in software that is available.

How to Begin

Plan! Start thinking about the goals of the inventory and who will be using it and how once it is completed. Think about the data that will support this goal. If necessary, go out and do a pilot inventory of a handful of trees to see how long it will take to inventory a tree and to see if there are data fields you are missing. It is much better to uncover those needs earlier in the inventory. Likewise, you may find that you are collecting data that will not be useful and thus can save time when you begin your inventory in earnest.

Most communities conduct volunteer tree inventories when leaves are on the trees in the spring, summer, and fall. This aids identification and enables surveyors to assess the condition of the foliage. For some specific problem inventories, such as a risk tree inventory, it also may be useful to collect information when leaves are off the trees, because it will be easier to assess the condition of the woody portions of trees.

Think about who will be collecting the data: volunteers, schoolchildren or older students, paid summer crews, or a paid professional arborist. Depending on the type of inventory, different groups of volunteers may be appropriate. For example, Newburyport has used schoolchildren to conduct inventories of vacant planting spaces in town. For other types of inventories, you may find a high school or college class that has a community service component that could help. There may be local groups, such as garden clubs or tree groups, that you could reach out to. Or, of course, you can reach out to the community for volunteers. You can also hire a professional to

conduct your inventory. (You can apply for an Urban & Community Forestry Challenge Grant for fund-

No matter what the age or experience level of your crews, training is a critical part of working with volunteers or paid summer workers. Ensure that the crews understand the need for the inventory and the procedures involved in data collection. Even with a professionally-conducted inventory, it is important that your expectations are clear and that you are getting the data you need and will use. For volunteers and paid summer crews, both classroom and field training are necessary to ensure the quality of data collection. The DCR Urban and Community Forestry Program can assist with this kind of trainors on measuring protocols, basic cluding text or visual definitions of terms used in the data collection can

be immensely helpful. Tools needed for volunteers include a data collection device—digital (such as a PDA) or a clipboard and pencil, diameter tape or Biltmore stick for measuring tree diameter, and clinometers for measuring tree height (optional). Transportation to the inventory sites will also be necessary for crews. For this reason, it might be preferable to focus on a smaller area per survey day, to concentrate the crews and facilitate or-



Utilizing Springfield's existing tree inventory, ing. Creating a handbook for surveyvolunteers inspect host trees for signs of Asian longhorned beetle in a high-risk area of tree ID, and tree condition, and inthe city. Photo by David Bloniarz

(Continued on page 4)

Street Tree Inventories

ganization and assistance to the crews.

When working with volunteers, ensure that they are prepared to work outside for a large portion of the day and will have water, sunscreen, food, safety vests, and

anything else that they may find helpful. Better yet—provide your volunteers with some of these things! Contact the local police to notify them that survey crews will be out in neighborhoods inventorying trees so that the police will be in the loop if residents call about people snooping around the town trees. Training volunteers how to respond to the public about the inventory can also be helpful, Town of Amherst Tree Inventory Online and having a handout

on the project may limit the time lost to lengthy conversations. An inventory is a great opportunity for educating not only the volunteers about urban forestry and the value of trees, but also the general public, and the volunteers or paid crews can play a large role in that regard.

If your inventory will take place over the course of several weekends or an entire season, find some time to go out and do some quality checks to ensure that data is being collected in a manner consistent with your expectations. With information on who collected the data, you may be able to eliminate errors in the future by revisiting issues that caused data inconsistencies with volunteers.

Once your inventory project is complete, enter your data into an electronic format (such as Microsoft Excel or Access) or into a tree inventory program such as i-Tree. There are many inventory management programs on the market. Your inventory should be in a format that will be readily usable. If you collected data digitally, importing the data file into a program such as i-Tree should be relatively easy. Once your data is in a useable format, you are ready to start using it. Use your inventory to prioritize planting and maintenance, report findings to the public and elected officials, spread the word about trees in your community, and otherwise support your

objectives. If you used a program like i-Tree to conduct your inventory, you can easily create reports to share the inventory results and generate monetary values for trees. Keep in mind, that if you are using i-Tree Streets, benefit information is only applicable to street trees. You

can still use i-Tree Streets to conduct an inventory of park trees, but for benefit reporting, these should be excluded from reports.

The most important thing about conducting a street tree inventory is to use it, whether for day-to-day management, for long-term planning, or for both. A tree inventory is just one step to practicing proactive urban forest management, but it is an important one as it can be the

basis for developing an urban forest management plan that can help managers work to maximize benefits, minimize costs, reduce risk, and begin or improve the systematic urban forest management in a community.

Picks and Shovels

How to Conduct a Street Tree Inventory (Tree City USA Bulletin #23) http://www.arborday.org (\$3.00)

Comparison of Urban Forest Tree Inventory and Management Software Systems. Michael G. Andreu, Erin M. Brown, Melissa H. Friedman, Robert J. Northrop, and Mary E. Thornhill. 2009. University of Florida IFAS Extension. http://edis.ifas.ufl.edu/fr288

iTree Streets.

http://www.itreetools.org/streets/index.php

List of tree inventory software:

http://www.michigan.gov/documents/dnr/Tree Inventory Software 287284 7.pdf

Species Spotlight—River birch, Betula nigra

By Mollie Freilicher MA-DCR Forester

We often find that trees that do well in wet conditions also do well in urban settings, due in part to their ability to Community Action withstand low oxygen conditions, either in wet soils or compacted ones

that occur in urban areas. This is true of river birch, a tree most often found growing along stream banks in the wild. River birch is native to the eastern United States and grows from southern New England to Florida and

west to Kansas and Minnesota. Its range includes the southeastern coastal plain, and it is the only native birch that naturally occurs there. It is a medium-sized tree. growing to 40-70



feet, with a spread of 40-60 feet. From an oval or pyramidal form when young, river birch grows to a rounded form at maturity. River birch often grows as a multi-stem tree.

The alternate, simple, doubly serrate, diamond-shaped



leaves are a lustrous green in summer and turn yellow in the fall, although in New England, the fall color of river birch may leave something to be desired. Like other birches, river birch grows at a medium to fast rate. River birch is monoecious, with both male and female flowers occurring on the same tree. Both male and female flowers are catkins. Male flowers are usually

in groups of 3 and are 2-3 inches long and droop down. Female flowers are shorter, 1 to 1.5 inches long, and upright. The fruit is a small nutlet, ripening in the spring. River birch, like all birches, will bleed sap if pruned in the spring. While not harmful to the tree, managers may prefer to prune river birch in the fall or winter.

River birch is known for its reddish-brown or salmon-colored, peeling bark that reveals a gray or gray-brown inner bark. As river birches mature, their bark becomes furrowed and platy and remains an ornamental characteris-

River birch is more tolerant of heat than other birches, another advan-



tage for planting the species in urban areas. River birch does best in soils with a pH below 6.5. In soils with pH above 6.5, iron chlorosis can occur. The canopy allows sunlight to pass through, making it possible to maintain a lawn underneath. It can be a good choice for locations that are wet for portions of the year, but dry in the summer. River birch makes a great specimen tree and landscape architects have used groupings of river birches to great effect.

Birch beer or vinegar can be made from fermenting river birch sap. River birch leaves and bark have also been used to treat dysentery and stomach problems. The wood from river birch is used for various wood products, including baskets, toys, furniture, and fuel. The Latin species, nigra (black), refers to the black color of the bark at maturity and betula is the classical term for birch.



Photos: Flowers-Duke University: Leaf-Virginia Tech; Form-Geneva Wirth; Bark-Mollie Freilicher

Growing Greener—in Lynn

The City of Lynn's Office of Economic and Community Development was a recent recipient of a MA DCR Urban & Community Forestry Challenge Grant to plant trees along streets lacking adequate canopy. The grant targeted West Lynn and included residential areas, as well as school properties. The plan incorporated ten different species, including red maple, tuliptree, zelkova, honeylocust, elm, sweetgum, and serviceberry to help diversify the planting and ensure that the right trees are planted in the right places. The application had wideranging support from schools, sports groups, and from various City departments, and represents a great opportunity for the Office of Economic and Community Development to work with different community groups.



Growing on Trees

New Publication on Climate Change and Forests

The Northern Institute of Applied Climate Science recently released the publication, "Forest Adaptation Resources: Climate Change Tools and Approaches for Land Managers" (FAR). Forest ecosystems are expected to undergo numerous changes in response to a changing climate. The FAR provides information and resources to help managers incorporate climate change considerations into management and identify actions that enable forests to adapt to changing conditions. This publication is part of the Climate Change Response Framework of the Forest Service's Eastern Region, Northern Research Station, and Northeastern Area State and Private Forestry. Download the publication online or order a print copy at: http://www.nrs.fs.fed.us/pubs/40543.

Tiny Wasps Attack Oaks on Cape and Islands

Many oaks on the Cape and Islands have been dying this year, and quickly. It is believed the cause is a wasp, the crypt gall wasp, or *Bassettia ceropteroides*, according to Bob Childs, UMass Extension Entomologist. The wasps are small, about 1/16 of an inch long and when eggs hatch, the saliva of the larvae triggers the tree to produce woody material, a gall, that disrupts the transport of nutrients to the branch, but provides shelter and food for the developing wasp. By one estimate, some trees only put out about 10% of their leaves. Long Island experienced a similar outbreak of the gall wasp in the 1990s that caused a decline in black oaks. On the Cape and Islands, trees may have already been weakened by previous defoliation from winter moth. Read the complete story at The Cape Cod Times.

Asian Longhorned Beetles are Out!

Keep an eye out for Asian longhorned beetle this summer. The Massachusetts Department of Agricultural Resources has a number of flyers on ALB and lookalikes in both English and Spanish available at: http://massnrc.org/pests/alb/albmedia.htm. You can also check out http://www.beetlebusters.info for more information.



Growing on Trees

Join the Massachusetts Grove!

The Grove is an advertising-free, networking website that is a partnership between the USDA-Forest Service and the Georgia Urban Forest Council. Sign up for free and join the Massachusetts Grove and read about and post information on tree planting and urban forestry activities in your community. Share pictures or stories from events, post information for an upcoming project, and learn about urban forestry activities in your state and around the country by joining the Grove.

Stories recently posted on the Grove:

<u>Growing Fruit Trees in Containers for the Space Challenged</u>

EAB Wasp Watchers Wanted in Massachusetts!
City of Lancaster, Green Infrastructure
Teaching the Trees, Another Great Summer Tree Read
The Best Trees for Shade in the Summer and Sun in the
Winter

Check in with the Grove as often as you like, or simply receive emails when we make updates to the Massachusetts Grove: www.massachusettsgrove.org

New England Wildflower Society Course

Native New England Shrubs

The many species of native New England shrubs display a wide variation in size, shape, color, and in characteristics of their bark, flowers, and fruits. This course introduces students to about 50 species growing in this region. We emphasize identification and become familiar with family characteristics and historic uses. Bring a hand lens to each session. Field sessions held in locations off-site with directions provided during the first class.

Dates: Wednesdays, September 5, 12, 19, 2012, 6:30-8:45 p.m. and Sundays, September 9, 16, 9 a.m.-1:30 p.m. Location: Garden in the Woods, Framingham, MA, and field sites

Course Code: bot3301

Instructor: Roland "Boot" Boutwell, naturalist Fee: \$215 (Member) / \$258 (Nonmember)

Limit: 15 Credit: Core--FB or HD; Elective--all certifi-

cates

More Information: http://www.newfs.org

Boston's Urban Forest Series

Invasive Species - Asian Longhorned Beetle Update

Tuesday, August 7, 6:30 p.m. – 8:00 p.m. Franklin Park Golf Course Clubhouse, 1 Circuit Dr., Dorchester Click here to see a map of this event location

August is Asian Longhorned Beetle (ALB) awareness month. You are invited to come learn about ALB, how to identify them, and how to report any potential sightings. Get the latest information on this devastating invasive insect. Presented by MA Dept. of Agricultural Resources and MA DCR. Registration required by contacting info@bostonnatural.org or 617-542-7696.



Women's Tree Climbing Workshop #6—Level II

October 12-13, 2012 Conway, MA

Level II - for previous attendees or climbers with experience in the trees... to advance your acquired skills

Agenda at a glance:

- Throwline taking it to the next level
- Work-planning while in the tree
- Aerial rescue techniques and information
- "LTBH" = long-term body health tips

More information at http://www.newenglandisa.org/workshops WTCW6.html

Women's Tree Climbing Workshop Logo by Alexandra Julius

Growing on Trees

Programs at the Hebert Arboretum in Pittsfield

AUGUST 7, Tuesday, 7 p.m. The Eagles Band Concert

We are sure to be entertained by this presentation of classic Big Band music.

AUGUST 14, Tuesday, 7 p.m.

Phil Grover's Rock & Roll Revue

A funny and exciting presentation of 80's and 90's hit songs. Not to be missed.

AUGUST 21, Tuesday, 7 p.m.

Rumours Band

A female fronted Rock & Roll Band singing popular songs ranging from Fleetwood Mac to Patsy Cline.

AUGUST 28, Tuesday, 6 p.m. Concerts At The Arboretum Rain Makeup Date

Special Thanks to Our Sponsors: Berkshire Bank, Greylock Federal Credit Union, Last Summer Concert Audience

These events are free. Donations are appreciated as they support the concerts. *All ages are welcome*. Meet behind Springside House at Hebert Arboretum. Bring lawn chairs or blankets, and come early to picnic or tour the gardens. Info: 413-443-5348

Sponsored by The Vincent J. Hebert Arboretum at Springside Park in cooperation with the City of Pittsfield Parks Commission, Department of Community Development/Long-Range Park Planning and Pittsfield Beautiful, Inc.

<u>Garden with Us</u> Call Judy 445-5540. Learn with us, in hands-on instruction, as we beautify our park.

<u>Pruning with Bob</u> Learn how to prune trees and shrubs, the second Tuesday of Each Month at 5PM.

At the Root: Air Tools Workshop

Thursday, September 27 (Rain Date: Friday, September 28)

With Rolf Briggs and Matt Foti Garden in the Woods, Framingham, MA \$75.00 ELA / NEWFS Member or \$90 Non-Member (8:30 AM – 3:30 PM – Lunch Included) Sponsored by the Ecological Landscaping Association and the New England Wildflower Society

Join this all-day workshop to explore how quickly and effectively you can use air tools to access the roots to identify and successfully address problems. The air tools demonstrations will feature:

- Addressing soil compaction
- Trenching for utility work, fencing, and more
- Proper planting of ball and burlap and container nursery stock
- Bare root tree transplanting
- Locating roots to establish tree protection zones prior to construction

More information at http://www.ecolandscaping.org/wp-content/uploads/2012/07/At-the-Root-Air-Tools-Workshops.pdf

Timing Control of Invasive Woody Plants

The Ecological Landscaping Association has a brief <u>guide</u> online for controlling invasive woody plants. They note that control activities should take place just before the plant reaches fruiting stage, which can occur from May to October depending on the plant and the location. For more information on the recommendations, see the Ecological Landscaping Association website: http://www.ecolandscaping.org/category/invasive-plants/

For more in-depth information on controlling invasive weeds, see *Invasive Plants of Asian Origin established in the United States and their Natural Enemies* by Hao Zheng, YunWu, Jianqing Ding, Denise Binion, Weidong Fu, and Richard Reardon. 2004. USDA Forest Service, Forest Health Technology Enterprise Team, Morgantown, WV, 26505, U.S.A. Volumes I & II. (Available Online)

Growing on Trees

Emerald Ash Borer Found in Connecticut for First Time

On July 20, officials in Connecticut announced the finding of emerald ash borer (Agrillus planipennis), also known as EAB,

outside Waterbury, in Naugatuck, and Prospect. The beetle detected in Prospect was discovered from a native wasp that preys on beetles in the *Buprestidae* family—the family that EAB belongs to. The wasp, known as the smoky-winged beetle bandit, does not sting and is an important tool in "biosurveillance" for EAB. Additional EAB were recovered from purple traps in Naugatuck, as well as in Prospect. Officials do not know how the beetle reached Naugatuck and Prospect. The areas are far from the nearest known infestations in and around Ulster and Greene counties in New York. According to Connecticut Department of Energy and Environmental Protection Commissioner Daniel C. Esty, "Connecticut has more than 22 million ash trees. The presence of EAB here could have a devastating effect on the beauty of our forests, state and local parks and neighborhoods as well as on the state's wood product industries. Now that EAB has been detected here, it is more important than ever to limit its spread." The state will implement meas-

ures to limit the spread of the infestation, including a quarantine zone, a ban on firewood enter-

ing the state through New York or Massachusetts unless the provenance of the wood can be certified, more traps, limits on timber contracts in the county, and a survey to date and find the extent of the infestation.

As of the end of July, EAB has not yet been detected in Massachusetts. An extensive trapping effort is underway in the Commonwealth to monitor for the presence of EAB.

To read the complete press release on the finds in Connecticut, see: http://www.ct.gov/caes/lib/caes/documents/ publications/press releases/2012/

press_release_emerald_ash_borer_found_in_prospect_and_naugatuck_connecticut_july_2012.pdf

Massachusetts has a program that trains volunteers who want to adopt known wasp colonies around the state and to monitor for presence of beetles. For information on the Wasp Watchers program in Massachusetts, see the Massachusetts Introduced Pest Outreach Blog, http://massnrc.org/pests/blog/

For more information on EAB and EAB infestations in the United States and Canada, see www.emeraldashborer.info







Photos: Adult EAB: David Cappaert, Michigan State University; Dying ash: Daniel Herms, Ohio State University; EAB purple trap: newenglandphotos.blogspot.com; EAB exit hole: David R. McKay, USDA-APHIS, PPQ

Emerald Ash Borer Workshop—September 18

DCR will host a workshop on emerald ash borer (EAB) targeted to forest owners, foresters, tree care professionals, land management professionals, and municipal employees. The workshop will cover topics to assist individuals and communities prepare for the arrival of the EAB and to minimize the potentially devastating economic impacts.

The workshop will be held at the Crane Model Farm in Dalton, MA. More information to follow through the Citizen Forester listserv.

On the Horizon

August	Asian Longhorned Beetle Awareness Month www.beetlebusters.info	October 5	MCA Exam (first exam under version 2.0 of the
August 2	Boston Nature Center: Urban Landscape Restoration, Mattapan, MA,	October 6 - 7	Study Guide), Wellesley, MA, <u>www.massarbor.org</u> 4 th Annual Women's Tree Climbing Workshop www.newenglandisa.org
August 7	http://www.ecolandscaping.org Boston Urban Forest Series: Invasive Species – ALB Update Franklin Park Golf Course Clubhouse,	October 17-18 October 19-20	Utility Arborist Association— New York Regional Meeting, Auburn, NY www.nysarborists.com DCR Tree Steward Training, Petersham, MA
August 11 - 15	Dorchester, MA http://www.bostonnatural.org ISA International Conference, Portland, OR www.isa-arbor.com	Oct 31 - Dec 12	UMass Extension Green School, Marlborough, MA,
August 23	UMass Extension Weed Identification Workshop - Grassy Weeds: an in-depth look French Hall, UMass Amherst	November 1	http://extension.umass.edu/landscape/ Deadline, <u>MA Urban & Community</u> <u>Forestry Challenge Grant</u>
September 18	MA-DCR EAB Workshop, Crane Model Farm, Dalton, MA	Nov 8-10 Nov 11 - 13	TCIA Expo, Baltimore, MD <u>www.tcia.org</u> New England Chapter ISA 46 th Annual
September 20	Southeast Tree Wardens 49th Annual Field Day and Equipment show, Plympton, MA	Nov 12 - 13	Conference, Newport, RI, <u>www.newenglandisa.org</u> Society of Municipal Arborists International
September 27	At the Root: Air Tools Workshop, Garden in the Woods, Framingham, MA	1407 12 13	Conference & Trade Show, Sacramento, CA http://www.urban-forestry.com/
October	http://www.ecolandscaping.org NeighborWoods Month http://neighborwoodsmonth.org/	Nov 14 - 16	Partners in Community Forestry National Conference, Sacramento, CA
October 1	Deadline, Intent to Apply for MA Urban & Community Forestry Challenge Grants	Nov 28 - Dec1	http://www.arborday.org/ ASCA <u>Annual Conference</u> , Rancho Bernardo Inn, San Diego, CA

Bureau of Forestry

Department of Conservation and Recreation 251 Causeway Street, Suite 900 Boston, MA 02114

Eric Seaborn, Program Coordinator <u>eric.seaborn@state.ma.us</u>, (617) 626-1468

Mollie Freilicher, Community Action Forester mollie.freilicher@state.ma.us, (413) 577-2966

dcr



Deval Patrick, Governor

Timothy Murray, Lieutenant Governor

Subscribe? Unsubscribe? You are receiving this email because you have requested to receive *The Citizen Forester*. If this is an error or you do not wish to receive this newsletter, please email

The Citizen Forester is made possible through a

setts Department of Conservation and Recrea-

If you have a topic you'd like to see covered or

want to submit something to *The Citizen For-*ester (article, photo, event listing, etc.), please

grant from the USDA Forest Service Urban and

Community Forestry Program and the Massachu-

eric.seaborn@state.ma.us

tion, Bureau of Forestry.

contact Mollie Freilicher

Richard Sullivan, Secretary, Executive Office of Energy and Environmental Affairs Edward M. Lambert, Jr., Commissioner, Department of Conservation and Recreation Peter Church, Director of Forest Stewardship, Department of Conservation and Recreation

The Department of Conservation and Recreation prohibits discrimination in employment on the basis of race, color, creed, religion, national origin, ethnicity, gender, gender identity or expression, age, sexual orientation, Vietnam Era Veteran status, or disability.